

S/N 09/541,857

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: James Digby Collier et al.

Examiner: Tuan Thieu Lam

Serial No.: 09/541,857

Group Art Unit: 2816

Filed: April 3, 2000

Docket: 491.039US1

**CPA FILED: August 22, 2002 (herewith)**

Title: INTEGRATED CIRCUIT

*#14/182 Am 1/3  
Amend  
9/8/02*

PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, D.C. 20231

Prior to examination, please amend the above-identified application as follows.

*RECEIVED  
AUG 27 2002  
TECHNOLOGY CENTER 2800*

IN THE CLAIMS

Please cancel claims 31-58 without prejudice.

Please add the following new claims 59-84:

*Sub C1  
B1*

59.(New) A signal generating circuit comprising:  
a first generating means for generating a first periodic signal;  
a second generating means for generating a second periodic signal which is in anti-phase  
with the first periodic signal;  
a frequency divider circuit comprising:  
(i) first and second input terminals for respectively receiving the first and second  
periodic signals;  
(ii) an even number of amplifier stages connected in series with an output of the last  
amplifier stage being connected to an input of the first amplifier stage, wherein  
each amplifier stage has an associated propagation delay and a transistor coupled  
between a supply terminal and a reference terminal for modulating the  
propagation delay through the associated amplifier stage;  
(iii) means for applying said first periodic signal received at said first input terminal to  
a control electrode of said transistor of the or each odd amplifier stage and for  
applying said second periodic signal received at said second input terminal to a  
control electrode of said transistor of the or each even amplifier stage, to modulate